Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

écrits, on y trouve toujours quelque chose de frappant et de nouveau. A la première page que j'ai ouverte, il compare la réalité objective avec l'harmonie que l'intelligence humaine croit découvrir dans la nature; et en dernière analyse il arrive à la conclusion que cette harmonie, qui s'exprime par les lois mathématiques, est la seule réalité objective, la seule vérité que nous puissons atteindre. Et en ajoutant que l'harmonie universelle du monde est la source de toute beauté, Henri Poincaré, mathématicien, arrive à la même conclusion laquelle Henri Fabre, naturaliste, est parvenu—c'est-à-dire que dans le Nombre on trouve *le pourquoi et le comment des choses*, et que l'on s'imagine y voir *la clef de voûte de l'Univers*."]

REVUE GENÉRALÉ DES SCIENCES, volume 32, January 15, 1921: "Electricité et géométrie, après les théories récentes" by L. Bloch, 5–11.

REVUE SCIENTIFIQUE, volume 59, January 22, 1921: "Sir Norman Lockyer: la découverte de l'hélium et la température des étoiles" by H. Deslandres, 51.

SCIENCE, new series, volume 53, February 18, 1921: "A brief historical consideration of the metric system" by L. C. Karpinski, 156–157; "The history of science and the American Association for the Advancement of Science" by F. Cajori, 163–164 [Last paragraph: "In the judgment of the present writer, the dignified and logical procedure for those interested in the History of Science is, therefore, to withdraw altogether from organized historical work in connection with the American Association for the Advancement of Science until such time when the council and general session will be ready to welcome them into the Association as a separate Section."]—March 4: "Human nature as a repeating factor: that thrice told tale" by W. W. Campbell, 211–212 [First sentence: "The following comments on Professor Wood's 'Thrice told tale,' *Science*, January 14, 1921, are based upon my long experience in showing celestial objects through a great telescope to tens of thousands of Saturday night visitors, and in explaining photographs of star clusters, the milky way, spiral nebulae, etc. to thousands of others."]; "Galileo and Wood" by A. G. Webster, 212–213—March 11: "Musical notation" by R. P. Baker, 235–236 [Letter; first three sentences: "While musical notation is not a matter of great scientific interest, reform presumably is. The desirability of the changes advocated by Professors Huntington and Hall [*1921*, 35, 225] may be admitted. This leaves the space available for briefly discussing the cost."]; Review by L. C. Karpinski of A. Mieli's *Gli Scienziati Italiani* (Rome, 1921), 237–238 [cf. *1921*, 173]; "The Einstein solar field and space of six dimensions" by E. Kasner, 238–239.

TEXAS MATHEMATICS TEACHERS' BULLETIN, volume 6, no. 2, February 10, 1921: "The National Committee on Mathematical Requirements" by E. R. Hedrick, 7–15; "Quantity or quality" by Mary Campbell, 16–17; "The slide rule" by A. E. Cooper, 18–26 [A photograph of a ten-inch Keuffel & Esser slide rule is on a fly-leaf. This may be cut out and pasted on pieces of thin wood.]; "Einstein's relativity and gravitation theories" by P. M. Batchelder, 27–34; "Brown Mathematical Prizes for freshmen" by H. J. Ettlinger, 35–36; "Some elementary principles of Non-Euclidean geometry" by Ethel Burch, 37–44; "Why study mathematics?" by Arnold Dresden, 45–54 [Reprinted from *School and Society*; see this MONTHLY, *1921*, 83]; "A mathematician in love" from *Boston Transcript*, 55.

ZEITSCHRIFT FUR MATHEMATISCHEN UND NATURWISSENSCHAFTLICHEN UNTERRICHT, volume 51, nos. 11–12, published December 1, 1920: "Zum Mathematikunterrichte am deutschen Gymnasium" by A. Weise, 257–262; "Die Schwingungsformel der oszillatorischen Entladung im Unterricht" by K. Hahn, 262–264; "Die Schwingungsdauer der oszillierenden Entladung im Unterricht" by W. Hillers, 264–273; "Kleine Mitteilungen," 273–276; "Aufgaben-Repertorium," 276–280; "Bücherbesprechungen" and "Zeitschriftenschau," 284–288.

UNDERGRADUATE MATHEMATICS CLUBS.

All reports of club activities should be sent to E. L. DODD, 3012 West Ave., Austin, Texas.

CLUB ACTIVITIES.

THE MATHEMATICS CLUB OF CONNECTICUT COLLEGE, New London, Conn. [*1918*, 270, 460; *1920*, 28.]

The general plan of the Club is to have at each meeting two papers. In 1919–20 the first paper was biographical and the second on any topic of general interest. The papers are planned not to exceed twenty minutes each. After the formal papers have been read and discussed, each member who during the preceding month has read an article of interest, directly or indirectly related to mathematics, is expected to report on it. This does not exclude mathematical jokes and puzzles. This closing feature has at many meetings been most valuable and stimulating, and the only difficulty that arises is in finding time to give all a chance to report. The plan for 1920–21 is quite similar.

The Club is run entirely by its undergraduate officers. The average attendance is about 15.

The programs for 1919–20 were as follows:

October 13, 1919: Social meeting of old and prospective members at the home of Professor David D. Leib.

November 3: "Euclid" by Margaret Paul '21. Discussion of Greek mathematics. "Mathematics requirements in several women's colleges" by Louise Avery '21.

December 1: "Not 10 but 12" by Justine McGowan '20; "Descartes" by Augusta O'Sullivan '22.

January 12, 1920: "Applied mathematics" by Miss Elizabeth C. Wright, bursar of the College; "Russian peasant method of multiplication" by Barbara Ashenden '21; "Fermat" by Ruth Wells '23.

March 1: "Newton and Leibnitz" by Marcia Langley '23; "How x came to be used for the unknown quantity" by Verna Kelsey '23.

April 26: "Modern American mathematicians" by Elizabeth Hall '22; "Codes and ciphers" by Dorothy S. Wheeler '22.

May 26: Business meeting; election of officers for ensuing year.

June 1: Picnic.

The officers for 1920–21 are: President, Dorothy Pryde '21; secretary, Dorothy Wheeler '22; treasurer, Marcia Langley '23; chairman program committee, Ruth E. Wells '23.

The programs for 1920–21 are as follows:

October 8, 1920: Social meeting of old and prospective members at the home of Professor Leib.

November 8: "Mathematical ability tests on high-school students" by Augusta O'Sullivan '22; "Some impossible problems" by Barbara Ashenden '21.

December 6: "Alice in Wonderland in the land of Math." by Marion Lyon '21 (Reading); "The number 9" by Marcia Langley '23.

January 10, 1921: "Trisecting an angle and duplicating a cube" by Ruth Wells '23; Current articles on "Fleury, the blind calculator"; "The number 13 in Wagner's life" by Alice Boehringer '23.

February 7: Valentine party.

March 7: "Mathematical recreations" by Professor Ray E. Gilman, Brown University.

(Reported by Professor Leib.)

THE MATHEMATICS CLUB OF GOUCHER COLLEGE, Baltimore, Md.

[*1918*, 357; *1919*, 305.]

The club met every two weeks from December to May in 1919–20. In order to give each member an opportunity to participate, it was decided to have several short papers presented at each meeting. The papers were, with few exceptions, prepared and presented by the students. Visiting students from the science departments frequently took part in the discussion—an evidence of desirable correlation of related subjects. The programs were as follows:

1. "Theorems concerning a triangle and its related circles" by Deldee Groff '20; "The nine-point circle" by Loretta Whelan '20.
2. "A simple ruler-and-compass construction for a regular pentagon, and discussion of the figure arising therefrom" by Jean Burke '20 and Mildred Trueheart '22.
3. "Zeno's paradoxes" by Ruth Marshall '20; "The origin and early history of the conic sections" by Alice Langerhausen '20.
4. "Trisection of an angle and squaring of a circle by use of the quadratrix" by Mildred Grafflin '20.
5. "Geometrical fallacies, *e.g.* All triangles are isosceles" by Dorothy Biscoe '22 and Rose Diggs '22; "The prismatoid formula" by Virginia Gallup '21.
6. "The life and work of Newton" by Elsie Keith '21; "Calculation of the velocity of escape from the earth's attraction" by Mildred Brown '21.
7. "Applications of mathematics in statistical work at the Johns Hopkins School of hygiene" by Agnes Bacon, Wellesley College.
8. Joint meeting of the Mathematics and Science Clubs. "Einstein's theory of relativity" by Professor Florence P. Lewis.

In accordance with the custom of the club, refreshments, prepared by the speakers of the evening, were served at each meeting during the period for informal discussion. The annual picnic took place after the final examinations.

(Reported by Professor Lewis.)

THE MATHEMATICAL CLUB, Harvard University, Cambridge, Mass.

[*1918*, 196, 449; *1919*, 262; *1920*, 480.]

The officers for 1920–21 are: President, Instructor Rudolph E. Langer; secretary-treasurer, Instructor Bancroft H. Brown; Faculty adviser, Professor Oliver D. Kellogg.

The programs for 1920–21 were as follows:

October 6, 1920: "Cubics and biquadratics" by Professor William F. Osgood.
October 20: "Plane cubic curves" by Charles A. Spoerl '22.
November 3: "A neglected chapter of analytic geometry" by Professor Kellogg.
November 17: "Dynamics of the billiard ball" by Instructor Charles A. Rupp.
December 15: "'Necessary,' 'sufficient,' and 'necessary and sufficient' conditions" by Instructor Carl A. Garabedian.

January 5, 1921: "The mathematics of investment" by Dr. James S. Taylor, Massachusetts Institute of Technology.
January 19: "Mathematical education in Sweden" by Dr. Einar Hille.
March 2: "The dog and duck problem"[1] by Professor Henry P. Manning of Brown University.

(Reported by Instructor Brown.)

THE JUNIOR MATHEMATICS CLUB, University of Minnesota, Minneapolis, Minn.
[*1918*, 312; *1919*, 209.]

The Mathematical Club at the University of Minnesota meets at irregular intervals. Some of the meetings are of the club as a whole and some are meetings of the Graduate Section (g.s.) only. Recent programs are as follows:
March 22, 1920: (g.s.) "A class of orthotomic cubics" by Instructor Robert M. Mathews.
May 3: (g.s.) "Dynamic balancing" by Professor Burt L. Newkirk.
May 17: Annual banquet.
May 24: (g.s.) "Pressure in water due to wave motion" by Professor G. C. Priester.
October 25: "Mathematics at the University of Edinburgh" by Professor Raymond W. Brink.
November 8: (g.s.) "Functions of infinitely many variables" by Professor William L. Hart.
November 22: "The geometric representation of complex variables" by Instructor Gladys Gibbens.
January 17, 1921: "Non-Euclidean geometry" by Professor William H. Bussey.

(Reported by Professor Bussey.)

THE MATHEMATICAL CLUB OF ROCKFORD COLLEGE, Rockford, Ill.
[*1918*, 188, 409: *1920*, 77.]

The officers for 1920–21 are: President, Margaret Dodd '21; vice-president, Anna Foster '21; secretary-treasurer, Frances Regan '22.

The following programs were given during the year.
September, 1920: Election of officers.
October: Initiation of new members. "Mathematical conundrums and catch problems, spiced with poetry."
November: A semi-humorous treatment of one, two and three dimensional spaces.
December: (Open meeting) "The fourth dimension" by Professor Bessie I. Miller.
January, 1921: (Open meeting) "The Einstein theory" by Professor Miller.

(Reported by Miss Dodd.)

THE PENTAGRAM, University of Texas, Austin, Texas.
[*1918*, 273; *1919*, 364; *1920*, 321.]

The following is the report for the first two terms of 1920–21:

---

[1] Compare this MONTHLY, *1921*, 54–61, 91–97, 278–279, 281-282.—EDITOR.

Officers: President, Paul Boner Gr.; vice-president, Jessie M. Fouts '21; secretary-treasurer, Dr. Jessie M. Jacobs, instructor in mathematics; executive council, Dr. Goldie P. Horton, instructor in mathematics, and Renke G. Lubben '21.

There are twenty-seven student members and sixteen faculty members.

October 7, 1920: Election of officers.

October 21: "Non-euclidean geometry" by Professor Robert L. Moore.

November 4: "Periodic phenomena and periodic functions" by Paul Boner Gr.

November 20: Social meeting and initiation of new members at the home of Dr. Horton.

December 2: "The number e" by Mary Cook '23.

January 13, 1921: "Numbers" by Professor Milton B. Porter.

January 27: "Complex numbers" by Sophie Anderson '22; "Matrices" by Ruth Peden '22.

February 10: "The vibrating string" by Jessie M. Fouts '21; "Laplace's equation" by L. Vernon Robinson '22.

February 24: "One of the most practical applications of actuarial mathematics" by Mr. C. P. Rockwell, state actuary of Texas.

(Reported by Dr. Jacobs.)

NOTES.

At some colleges it seems best to form clubs for both mathematics and science students.

Professor Clyde S. Atchison, of Washington and Jefferson College, Washington, Pa., writes (February 4, 1921):

"One year ago two senior honor men in the department of mathematics, with the coöperation of the head of the department, initiated a movement for the organization of an honorary fraternity, limited in membership, for those upperclassmen especially interested in mathematics, physics, and chemistry. We now have a live organization, in which mathematics occupies its full place. Occasionally open meetings are held."

At Baldwin-Wallace College, Berea, O., according to Professor O. L. Dustheimer, about one third of the student body were present at a mathematical gathering early in January, 1921, at which questions were propounded, such as:

"Arrange the figures 1 to 9 inclusive, so their sum will be 100.

"John found $5.00; what was his gain per cent.?

"When is a number divisible by 9?

"If a melon 20 inches in diameter is worth 20 cents, what is one thirty inches in diameter worth?

"At 4 per cent., what would be the amount due last Christmas on $1.00 put at interest at the beginning of the Christian Era, to be compounded annually?

"If 6 cats eat 6 rats in 6 minutes, how many cats will it take to eat 100 rats in 100 minutes?"